(1) GENERAL INFORMATION:

    (i) APPLICANT: Vidal et al., Marc

    (ii) TITLE OF INVENTION: REVERSE TWO-HYBRID SYSTEMS

   (iii) NUMBER OF SEQUENCES: 19

    (iv) CORRESPONDENCE ADDRESS:
        (A) ADDRESSEE: Fish & Richardson P.C.
        (B) STREET: 601 13th Street, NW
        (C) CITY: Washington
        (D) STATE: DC
        (E) COUNTRY: USA
        (F) ZIP: 20005

    (v) COMPUTER READABLE FORM:
        (A) MEDIUM TYPE: Floppy disk
        (B) COMPUTER: IBM PC compatible
        (C) OPERATING SYSTEM: PC-DOS/MS-DOS
        (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

    (vi) CURRENT APPLICATION DATA:
        (A) APPLICATION NUMBER: US 08/420,525
        (B) FILING DATE: 11-APR-1995
        (C) CLASSIFICATION:

  (viii) ATTORNEY/AGENT INFORMATION:
        (A) NAME: Ellison, Eldora L.
        (B) REGISTRATION NUMBER: 39,967
        (C) REFERENCE/DOCKET NUMBER: 00786/239001

    (ix) TELECOMMUNICATION INFORMATION:
        (A) TELEPHONE: 202/783-5070
        (B) TELEFAX: 202/782-2331

(2) INFORMATION FOR SEQ ID NO:1:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 60 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GAAGGTTAAT GTGGCTGTGG TTTCAGGGTC CATAAAGCTT GTCCTGGAAG TCTCATGGAG   60

INFORMATION FOR SEQ ID NO 1.

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 34 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TCAGGATCCC TAGGTTCCTT TGTTACTTCT TCCG   34

(2) INFORMATION FOR SEQ ID NO:3:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 23 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GCGAGGCATA TTTATGGTGA AGG   23

(2) INFORMATION FOR SEQ ID NO:4:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 22 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CATTTCCGTG CAAGGTACTA AC   22

(2) INFORMATION FOR SEQ ID NO:5:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 54 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

AAGCTTATGC CCAAGAAGAA GCGGAAGGTC TCGAGGTCGA CCCCGGGAAT TCAG   54

(2) INFORMATION FOR SEQ ID NO:6

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 12 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Met Pro Lys Lys Lys Arg Lys Val Ser Arg Ser Thr
1   5   10

(2) INFORMATION FOR SEQ ID NO:7:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 106 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GTATCGTCGA GGTCGACCCC GGGAATTCAG ATCTACTAGT GCGGCCGCTA AGTAAGTAAG   60

ACGTCGAGCT CTAAGTAAGT AACGGCCGCC ACCGCGGTGG AGCTTT   106

(2) INFORMATION FOR SEQ ID NO:8:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 12 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Val Ser Ser Arg Ser Thr Pro Gly Ile Gln Ile Tyr
1   5   10

(2) INFORMATION FOR SEQ ID NO:9:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 106 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

AAAGAGGGTG GGTCGACCCC GGGAATTCAG ATCTACTAGT GCGGCCGCTA AGTAAGTAAG   60

ACGTCGAGCT CTAAGTAAGT AACGGCCGCC ACCGCGGTGG AGCTTT   106

(2) INFORMATION FOR SEQ ID NO:10:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 12 amino acids
            (B) TYPE: amino acid
            (C) STRANDEDNESS: not relevant
            (D) TOPOLOGY: linear

       (ii) MOLECULE TYPE: peptide

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

        Lys Glu Gly Gly Ser Thr Pro Gly Ile Gln Ile Tyr
        1   5   10

(2) INFORMATION FOR SEQ ID NO:11:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 18 amino acids
            (B) TYPE: amino acid
            (C) STRANDEDNESS: not relevant
            (D) TOPOLOGY: linear

       (ii) MOLECULE TYPE: peptide

        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

        Gln Ile Asn Leu Lys Ser His Ser Gly Pro Ile His Val Leu Leu Ile
        1   5   10   15

        Asn Lys

(2) INFORMATION FOR SEQ ID NO:12:

        (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 18 amino acids
            (B) TYPE: amino acid
            (C) STRANDEDNESS: not relevant
            (D) TOPOLOGY: linear

       (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Gln Ile His Leu Lys Ser Val Ser Gly Pro Ile Glu Val Leu Leu Val
1   5   10   15

Asn Lys

(2) INFORMATION FOR SEQ ID NO:13:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Gln Ile His Leu Ala Ser Thr Gln Gly Pro Ile Glu Val Tyr Leu Cys
1   5   10   15

Pro Glu

(2) INFORMATION FOR SEQ ID NO:14:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Gln Ile Tyr Leu Lys Ser Thr Gln Gly Pro Ile Glu Val Tyr Leu Cys
1   5   10   15

Pro Glu

(2) INFORMATION FOR SEQ ID NO:15:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```
Gln Ile Ser Leu Lys Ser Lys Gln Gly Pro Ile Asp Val Phe Leu Cys
1               5                   10                  15

Pro Glu
```

(2) INFORMATION FOR SEQ ID NO:16:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```
Gln Thr Ser Leu Lys Ser Lys Gln Gly Pro Ile Asp Val Phe Leu Cys
1               5                   10                  15

Pro Glu
```

(2) INFORMATION FOR SEQ ID NO:17:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```
Gln Ile Ser Leu Lys Ser Lys Pro Gly Pro Ile Gly Val Phe Leu Cys
1               5                   10                  15

Pro Glu
```

(2) INFORMATION FOR SEQ ID NO:18:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

Gln Thr Ser Leu Lys Ser Lys Gln Gly Pro Ile Asp Val Phe Leu Cys
1   5   10   15

Pro Glu

(2) INFORMATION FOR SEQ ID NO:19:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 18 amino acids
        (B) TYPE: amino acid
        (C) STRANDEDNESS: not relevant
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: peptide

    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Gln Asn Ser Leu Lys Ser Lys Gln Gly Pro Ile Asp Val Phe Leu Cys
1   5   10   15

Pro Glu